



# FEMA

## Venting Breakaway Walls Saves Homeowner Thousands

**Okaloosa County, FL** - Dan Sluka and his wife, Dottie, moved from Detroit, Michigan, to the Gulf Coast of Florida in 2001 after building their dream home in a Special Flood Hazard Area a few miles east of Pensacola, with a view of the Santa Rosa Sound and the Gulf of Mexico beyond.

The Sluka's property is located in Zone AE. However, because they are only 1,000 feet from the water, they decided to build to the more rigorous V Zone standards. Their builder used wooden pilings to strengthen the structure of the house against storm surge and to raise the main part of the house several feet higher than the minimum height required by the county.

The code for their county allows areas under elevated homes to be enclosed and used for storage and parking. The Sluka's builder surrounded the area under the home with breakaway walls. To improve wind resistance, the house is built with 2"x 6" studs, hurricane straps, wind-resistant shingles, and hurricane shutters on all doors and windows. The outside air-conditioning unit is installed on a platform several feet above the ground.

In the years before 2004, when Hurricane Ivan hit the Florida Panhandle, Dan stored his tools, sporting equipment, tapes of past music concerts, and filing cabinets with several years of archived work and personal papers in the enclosed area under the home.

The Sluka's home performed as designed during Hurricane Ivan, but not quite the way they'd hoped. The storm surge associated with Ivan delivered floodwaters considerably higher than the "100-year" (1-percent-annual-chance) level, causing widespread damage throughout the area.

Although the Sluka's main living area was undamaged, when the breakaway walls failed as designed, everything inside the storage area—tools, tapes, personal papers—was washed away. In terms of damage to the building, high winds caused minor siding damage. Dan estimates it cost about \$24,000 to repair the flood damage. His NFIP flood insurance policy covered some flood damage to the building, but not to the stored belongings, the latter of which Dan estimated were worth about \$20,000.

Dan decided he wanted to do something different when repairing so the breakaway walls wouldn't fail so easily in future storms. He researched hydrostatic pressure and discovered a manufacturer making engineered and certified flood vents, which could help limit future damage while still protecting the primary structure from wave and surge forces.

Dan then had his builder install the flood vents when replacing the breakaway walls. Knowing the enclosure will flood during future hurricanes, Dan decided to take another precaution to better protect their stored property. He built a loft space in the garage adjacent to the storage room. Now, when a hurricane moves into the Gulf, he relocates the stored items to the loft until the threat passes.

Dan's idea to install flood vents in the breakaway walls was tested in 2005 when Hurricane Dennis flooded the neighborhood. Although 2.5 feet of water entered the storage area through the flood vents, instead of a large bill to repair the breakaway walls, says Dan, "I just had to power wash the walls. We didn't have any damage."



Okaloosa County,  
Florida



### Quick Facts

Sector:

**Private**

Cost:

**\$801.00 (Actual)**

Primary Activity/Project:

**Building Codes**

Primary Funding:

**Homeowner**